

## Refine Search

### Search Results -

Terms	Documents
L4 and (560/\$ or 528/\$ or 428/\$)	13

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L5

Refine Search

Recall Text

Clear

Interrupt

### Search History

DATE: Saturday, August 05, 2006   [Printable Copy](#)   [Create Case](#)

**Set Name**   **Query**  
 side by side

**Hit Count**   **Set Name**  
 result set

*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ*

<u>L5</u>	L4 and (560/\$ or 528/\$ or 428/\$)	13	<u>L5</u>
<u>L4</u>	L1 and acryloyl\$7	22	<u>L4</u>
<u>L3</u>	L1 and acryoyl\$7	0	<u>L3</u>
<u>L2</u>	L1 and acryoyloxy	0	<u>L2</u>
<u>L1</u>	mesogen and amino and polymerizable group	76	<u>L1</u>

END OF SEARCH HISTORY

## Hit List

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**Search Results - Record(s) 1 through 10 of 13 returned.**

☐ 1. Document ID: US 20060083867 A1

L5: Entry 1 of 13

File: PGPB

Apr 20, 2006

PGPUB-DOCUMENT-NUMBER: 20060083867

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20060083867 A1

TITLE: Retarder and circular polarizer

PUBLICATION-DATE: April 20, 2006

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Ito; Tadashi	Minami-ashigara-shi, Kanagawa		JP
Takeuchi; Hiroshi	Minami-ashigara-shi, Kanagawa		JP

US-CL-CURRENT: [428/1.3](#); [349/117](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw De
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☐ 2. Document ID: US 20040219305 A1

L5: Entry 2 of 13

File: PGPB

Nov 4, 2004

PGPUB-DOCUMENT-NUMBER: 20040219305

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040219305 A1

TITLE: Retardation film and elliptically polarizing film

PUBLICATION-DATE: November 4, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Nishikawa, Hideyuki	Kanagawa		JP
Ohkawa, Atsuhiko	Kanagawa		JP

US-CL-CURRENT: [428/1.2](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMIC	Draw De
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☐ 3. Document ID: US 20040199004 A1

L5: Entry 3 of 13

File: PGPB

Oct 7, 2004

PGPUB-DOCUMENT-NUMBER: 20040199004  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20040199004 A1

TITLE: Novel mesogens

PUBLICATION-DATE: October 7, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Wellinghoff, Stephen T.	San Antonio	TX	US
Hanson, Douglas P.	San Antonio	TX	US

US-CL-CURRENT: 560/19; 560/66

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw De
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☐ 4. Document ID: US 20040144954 A1

L5: Entry 4 of 13

File: PGPB

Jul 29, 2004

PGPUB-DOCUMENT-NUMBER: 20040144954  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20040144954 A1

TITLE: Selective ether cleavage synthesis of liquid crystals

PUBLICATION-DATE: July 29, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Wellinghoff, Stephen T.	San Antonio	TX	US
Hanson, Douglas P.	San Antonio	TX	US

US-CL-CURRENT: 252/299.67; 252/299.01, 560/76, 560/8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw De
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☐ 5. Document ID: US 20040142116 A1

L5: Entry 5 of 13

File: PGPB

Jul 22, 2004

PGPUB-DOCUMENT-NUMBER: 20040142116  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20040142116 A1

TITLE: Compound, retardation plate and method for forming optically anisotropic layer

PUBLICATION-DATE: July 22, 2004

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Nishikawa, Hideyuki	Kanagawa		JP
Ohkawa, Atsuhiko	Kanagawa		JP

US-CL-CURRENT: 428/1.1; 252/299.01, 252/299.61, 252/299.62, 252/299.63, 252/299.67

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw. De
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☐ 6. Document ID: US 20030055280 A1

L5: Entry 6 of 13

File: PGPB

Mar 20, 2003

PGPUB-DOCUMENT-NUMBER: 20030055280

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030055280 A1

TITLE: Methods for synthesis of liquid crystals

PUBLICATION-DATE: March 20, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Wellinghoff, Stephen T.	San Antonio	TX	US
Hanson, Douglas P.	San Antonio	TX	US

US-CL-CURRENT: 560/76; 560/8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw. De
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☐ 7. Document ID: US 20020177727 A1

L5: Entry 7 of 13

File: PGPB

Nov 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020177727

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020177727 A1

TITLE: Novel mesogens

PUBLICATION-DATE: November 28, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Wellinghoff, Stephen T.	San Antonio	TX	US

Hanson, Douglas P.

San Antonio

CA

US

US-CL-CURRENT: 560/86; 428/1.1, 528/308

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw De
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☐ 8. Document ID: US 7041234 B2

L5: Entry 8 of 13

File: USPT

May 9, 2006

US-PAT-NO: 7041234

DOCUMENT-IDENTIFIER: US 7041234 B2

TITLE: Methods for synthesis of liquid crystals

PRIOR-PUBLICATION:

DOC-ID

DATE

US 20030055280 A1

March 20, 2003

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw De
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☐ 9. Document ID: US 6749771 B1

L5: Entry 9 of 13

File: USPT

Jun 15, 2004

US-PAT-NO: 6749771

DOCUMENT-IDENTIFIER: US 6749771 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: Compounds as components in polymerizable liquid crystalline mixtures and liquid crystal polymer networks comprising them

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw De
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☐ 10. Document ID: US 6136225 A

L5: Entry 10 of 13

File: USPT

Oct 24, 2000

US-PAT-NO: 6136225

DOCUMENT-IDENTIFIER: US 6136225 A

TITLE: Polymerizable liquid-crystalline compounds

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw De
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Terms	Documents
L4 and (560/\$ or 528/\$ or 428/\$)	13

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Search Results - Record(s) 11 through 13 of 13 returned.

☐ 11. Document ID: US 5256784 A

L5: Entry 11 of 13

File: USPT

Oct 26, 1993

US-PAT-NO: 5256784

DOCUMENT-IDENTIFIER: US 5256784 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Nonlineaphores and polymers incorporating such nonlineaphores

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 12. Document ID: US 5087672 A

L5: Entry 12 of 13

File: USPT

Feb 11, 1992

US-PAT-NO: 5087672

DOCUMENT-IDENTIFIER: US 5087672 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Fluorine-containing acrylate and methacrylate side-chain liquid crystal monomers and polymers

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 13. Document ID: US 5078910 A

L5: Entry 13 of 13

File: USPT

Jan 7, 1992

US-PAT-NO: 5078910

DOCUMENT-IDENTIFIER: US 5078910 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Polimerization of liquid crystalline monomers

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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[Clear](#)[Generate Collection](#)[Print](#)[Fwd Refs](#)[Bkwd Refs](#)[Generate OACS](#)

Terms	Documents
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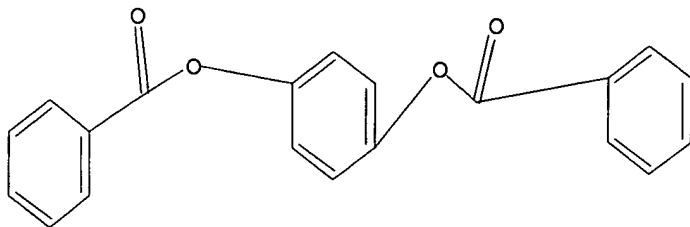
Uploading C:\Program Files\Stnexp\Queries\121.str

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 12:34:45 FILE 'REGISTRY'



(FILE 'HOME' ENTERED AT 12:31:04 ON 05 AUG 2006)

FILE 'CAPLUS' ENTERED AT 12:34:23 ON 05 AUG 2006

L1 STRUCTURE UPLOADED  
S L1

FILE 'REGISTRY' ENTERED AT 12:34:45 ON 05 AUG 2006

L2 5618 S L1 FULL.

FILE 'CAPLUS' ENTERED AT 12:34:46 ON 05 AUG 2006

L3 2501 S L2 FULL  
L4 74 S L3 AND (HYDROXYL OR AMINO OR SULFHYDRYL)  
L5 6 S L4 AND POLYMERIZABLE  
L6 210 S L3 AND POLYMERIZABLE  
L7 118 S L3 AND SPACER  
L8 126 S L3 AND MESOGEN  
L9 394 S L8 OR L7 OR L6  
L10 190 S L9 AND PY<2001  
L11 25 S L10 AND ACRYLO?

=> d 15 1-6 ibib abs hitstr

L5 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1189318 CAPLUS

DOCUMENT NUMBER: 143:461690

TITLE: Polymerizable dichromophoric dichroic azo  
dyes

INVENTOR(S): Peglow, Thomas; Cherkaoui, Zoubair Mohammed; Moia,  
Franco

PATENT ASSIGNEE(S): Rolic A.-G., Switz.

SOURCE: Eur. Pat. Appl., 47 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1593713	A1	20051109	EP 2004-405280	20040504
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
WO 2005105932	A1	20051110	WO 2005-CH233	20050426
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.:

EP 2004-405280

A 20040504

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title dye having sufficient solubility in combination with high coloring power and high order parameter comprises azo-chromophores to which polymerizable groups are attached. 0.61 g of 4-[[6-(methacryloyloxy)hexyl]oxy]benzoic acid in THF (30 mL) and triethylamine (2.02 g) treated with 0.23 g of methansulfochloride, was reacted with 0.85 g of 4-[(E)-[4-[(E)-[4-[(4-hydroxybenzyl)amino]-1-naphthyl]diazenyl]phenyl 4-[(E)-[4-[(E)-[4-[(4-hydroxybenzyl)amino]-1-naphthyl]diazenyl]-1-naphthyl]diazenyl]benzoate in presence of 10 mg of DMAP for 24 h at room temperature to give 0.70 g (54%) of compound (I) as a black powder,  $\lambda_{\text{max}}$  = 574 nm,  $\epsilon$  = 83000 (THF).

IT 868754-79-4P 868754-80-7P 868754-81-8P  
868754-82-9P 868754-83-0P

RL: IMF (Industrial manufacture); PRP (Properties); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(polymerizable dichromophoric dichroic azo dyes)

RN 868754-79-4 CAPLUS

CN Benzoic acid, 2,5-bis[[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]-, 10-[(4'-cyano[1,1'-biphenyl]-4-yl)oxy]decyl ester, polymer with 1,6-hexanediyl bis[4-[(1E)-[4-[(1E)-[4-[[[4-[[6-[(2-methyl-1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]phenyl]methyl]amino]-1-naphthalenyl]azo]-1-naphthalenyl]azo]benzoate] (9CI) (CA INDEX NAME)

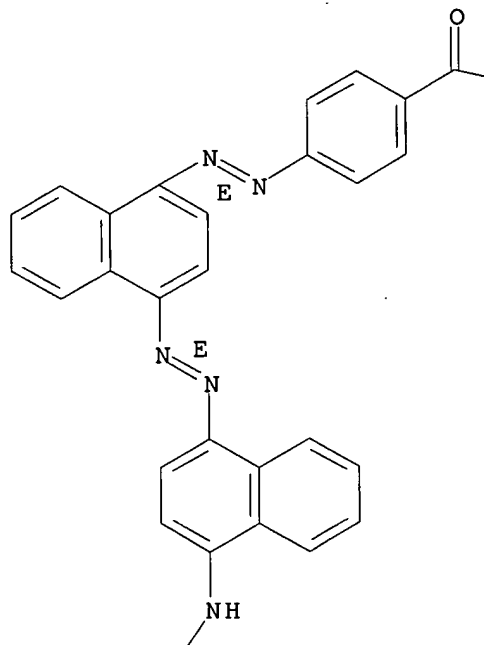
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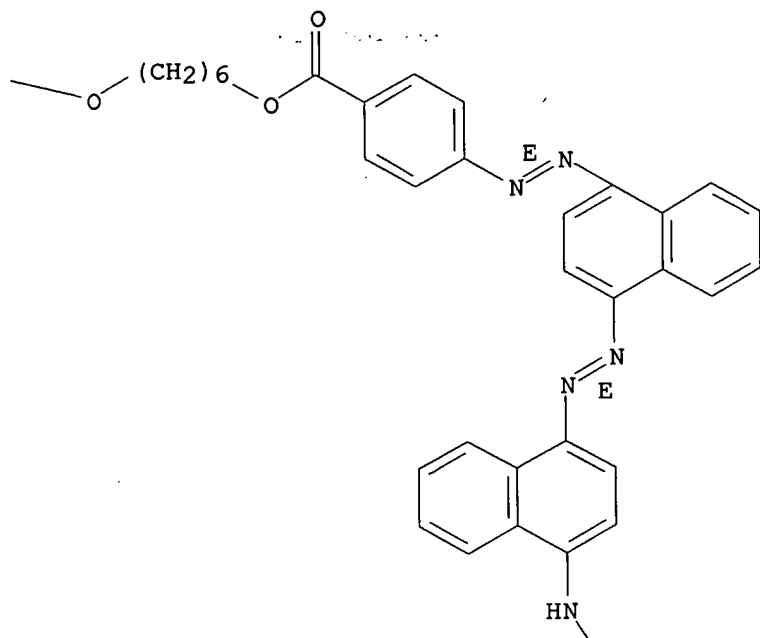
CMF C108 H100 N10 O14

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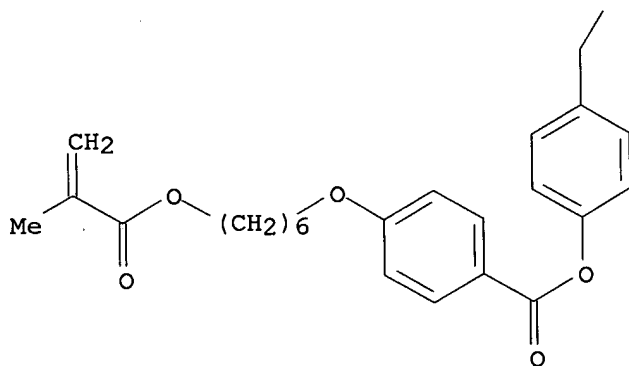
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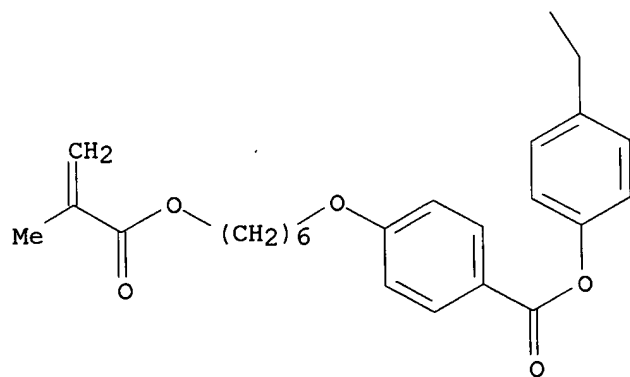
PAGE 1-B



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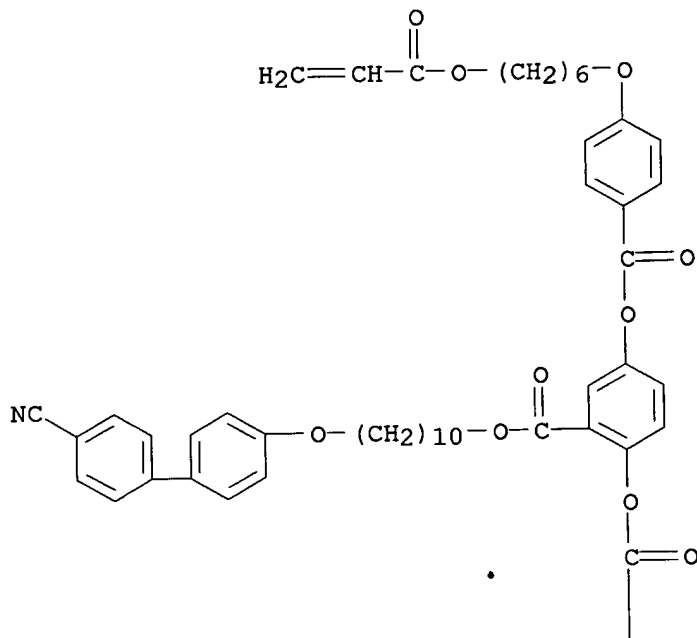
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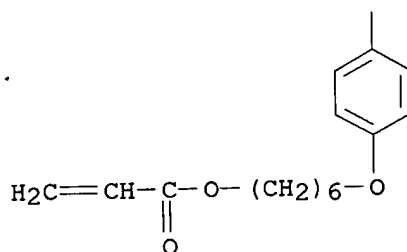
CM 2

CRN 853993-28-9  
CMF C62 H69 N 013

PAGE 1-A



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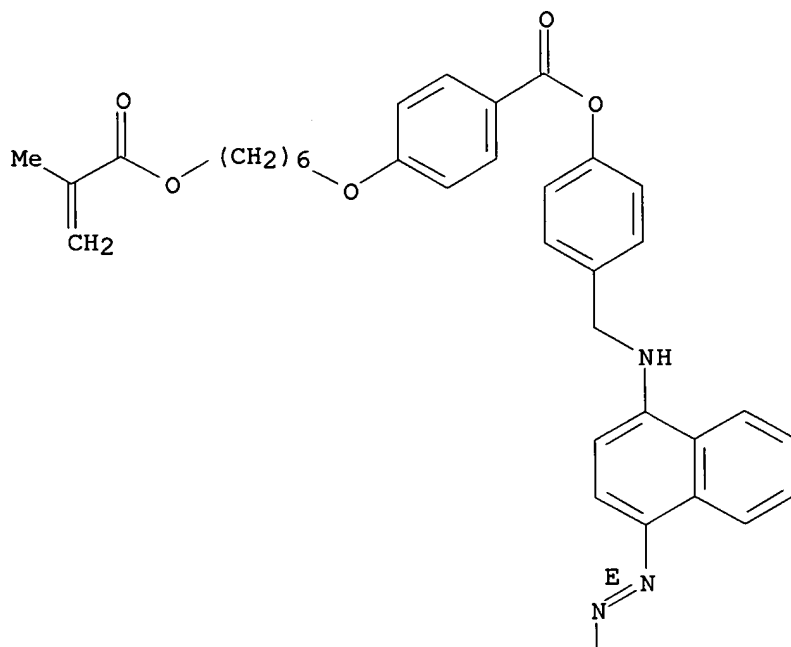
RN 868754-80-7 CAPLUS  
CN Benzoic acid, 2,5-bis[[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]-  
10-[(4'-cyano[1,1'-biphenyl]-4-yl)oxy]decyl ester, polymer with  
4-[(1E)-[4-[(1E)-[4-[[[4-[[4-[[6-[(2-methyl-1-oxo-2-  
propenyl)oxy]hexyl]oxy]benzoyl]oxy]phenyl]methyl]amino]-1-  
naphthalenyl]azo]-1-naphthalenyl]azo]phenyl 4-[(1E)-[4-[(1E)-[4-[[[4-[[4-  
[[6-[(2-methyl-1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]phenyl]methyl]am  
ino]-1-naphthalenyl]azo]-1-naphthalenyl]azo]benzoate (9CI) (CA INDEX  
NAME)

CM 1

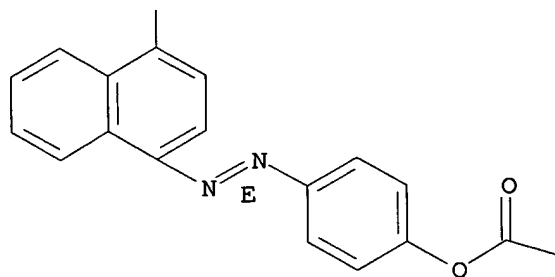
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CMF C101 H88 N10 O12

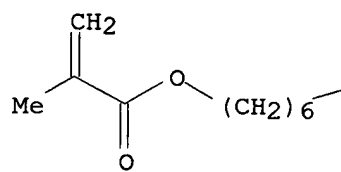
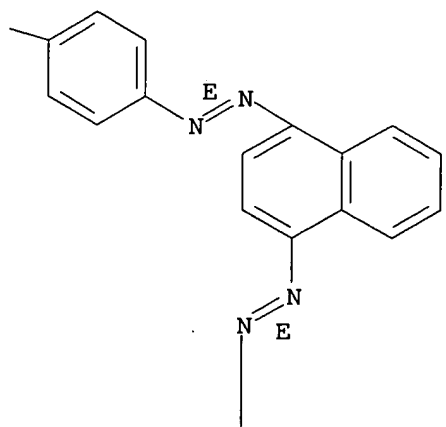
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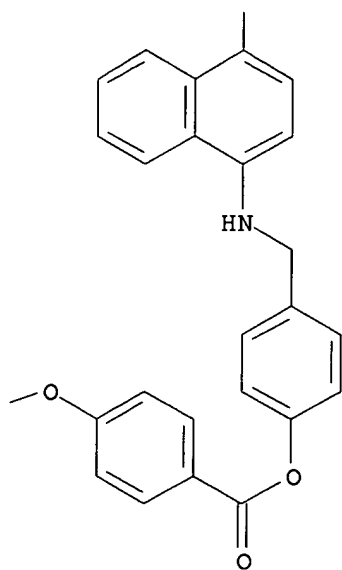
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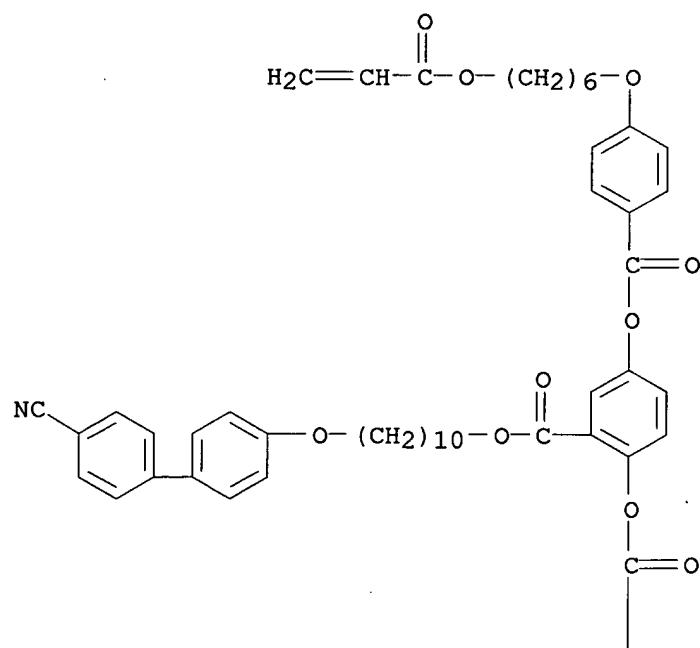


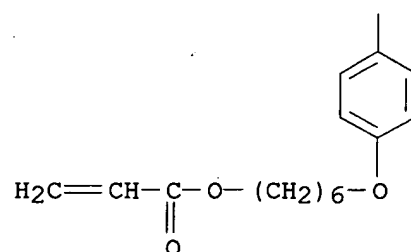




CM 2

CRN 853993-28-9  
CMF C62 H69 N O13





RN 868754-81-8 CAPLUS

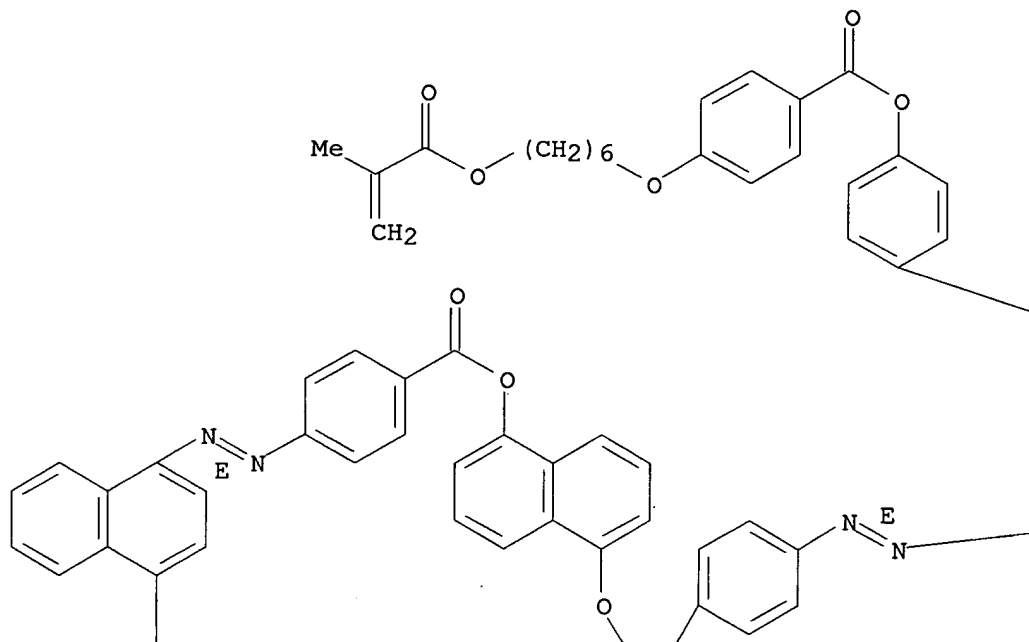
CN Benzoic acid, 2,5-bis[[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]-, 10-[(4'-cyano[1,1'-biphenyl]-4-yl)oxy]decyl ester, polymer with 1,5-naphthalenediyl bis[4-[(1E)-[4-[[[4-[[4-[[6-[(2-methyl-1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]phenyl]methyl]amino]-1-naphthalenyl]azo]benzoate] (9CI) (CA INDEX NAME)

CM 1

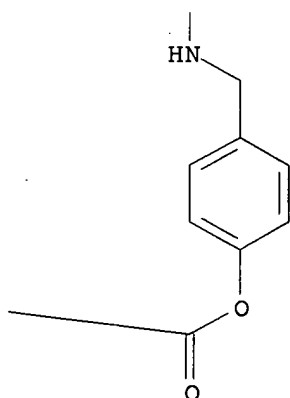
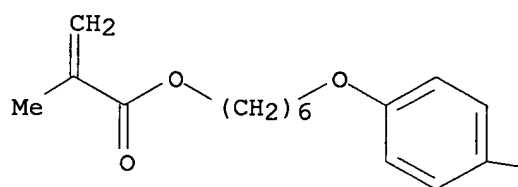
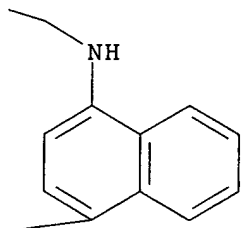
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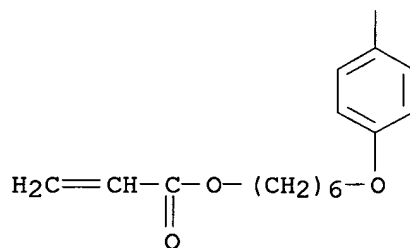
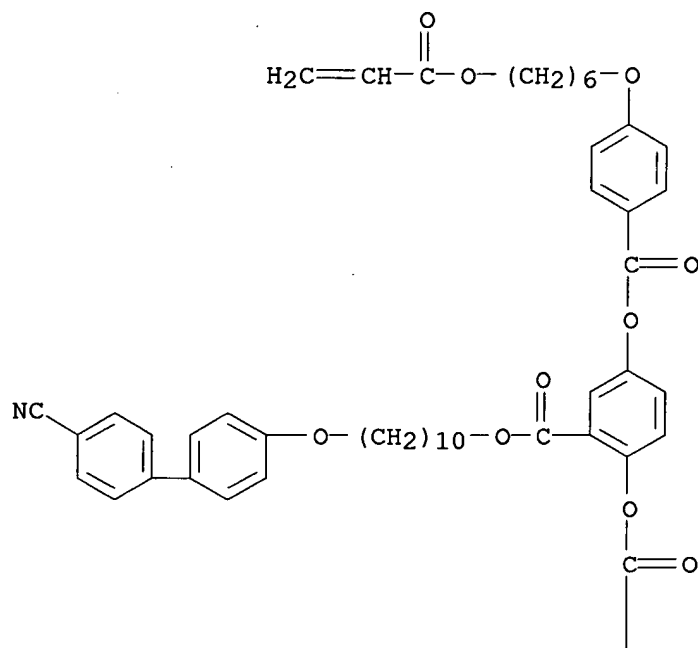
CMF C92 H82 N6 O14

Double bond geometry as shown.







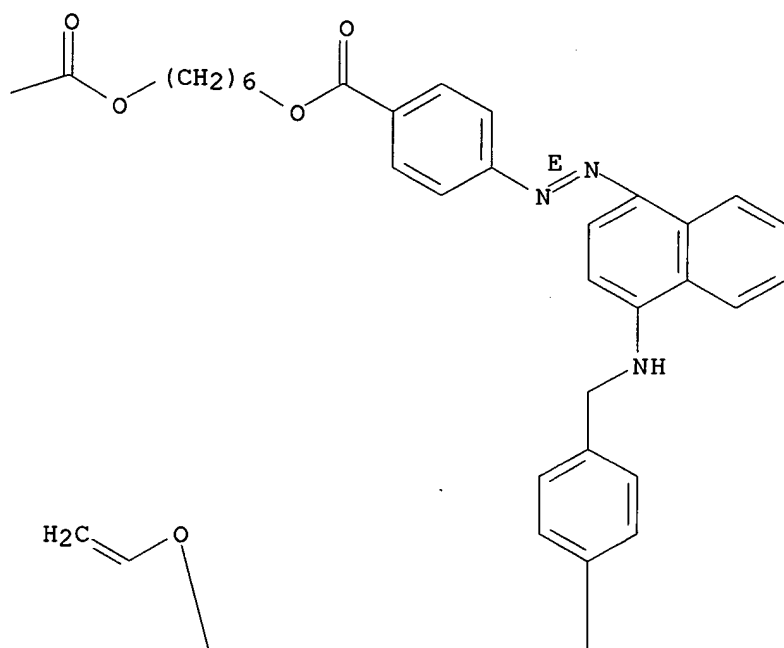
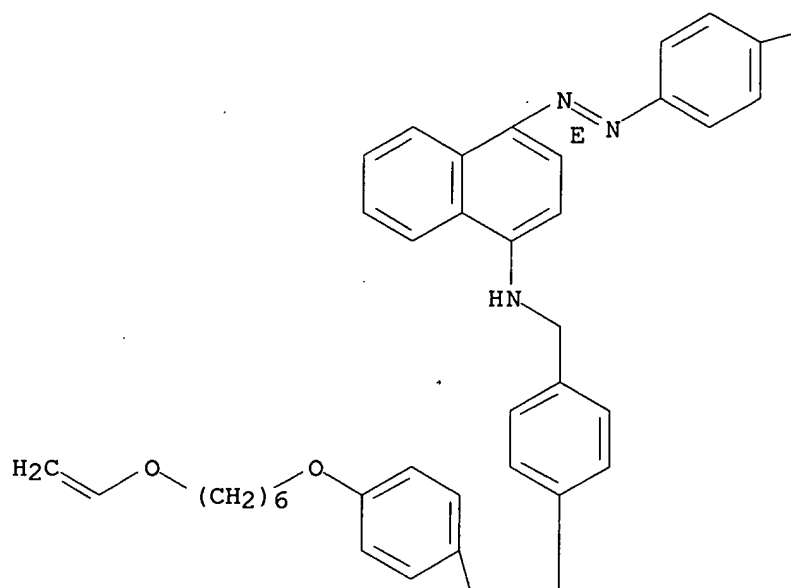


RN 868754-82-9 CAPLUS  
 CN Benzoic acid, 2,5-bis[[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]-  
 , 10-[(4'-cyano[1,1'-biphenyl]-4-yl)oxy]decyl ester, polymer with  
 1,6-hexanediyl bis[4-[(1E)-[4-[[[4-[[4-[[6-(ethenyloxy)hexyl]oxy]benzoyl]o  
 xy]phenyl]methyl]amino]-1-naphthalenyl]azo]benzoate] (9CI) (CA INDEX  
 NAME)

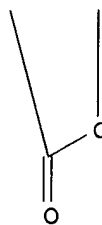
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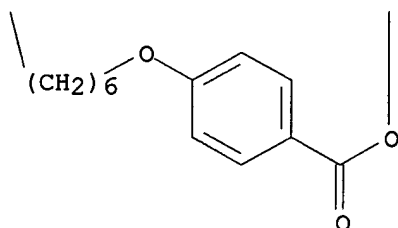
Double bond geometry as shown.



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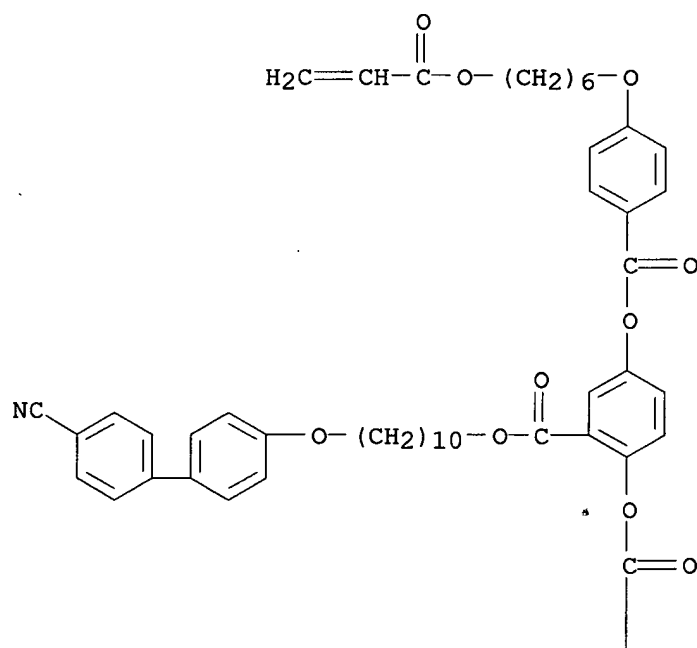
PAGE 2-B

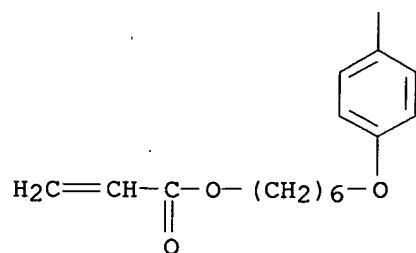


CM 2

CRN 853993-28-9  
CMF C62 H69 N O13

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RN 868754-83-0 CAPLUS

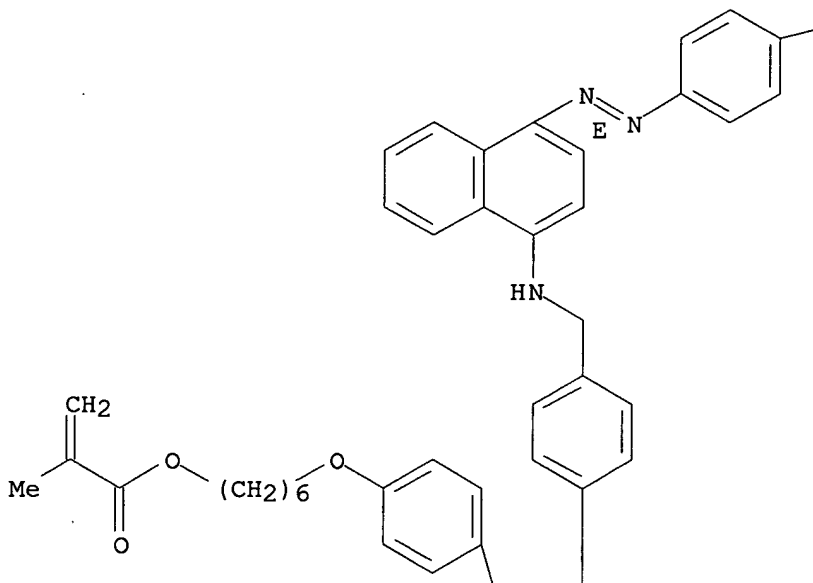
CN Benzoic acid, 2,5-bis[[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]-, 10-[(4'-cyano[1,1'-biphenyl]-4-yl)oxy]decyl ester, polymer with 1,6-hexanediyl bis[4-[(1E)-[4-[[[4-[[4-[[6-[(2-methyl-1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]phenyl]methyl]amino]-1-naphthalenyl]azo]benzoate] (9CI) (CA INDEX NAME)

CM 1

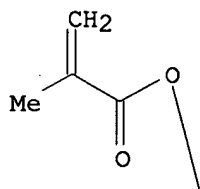
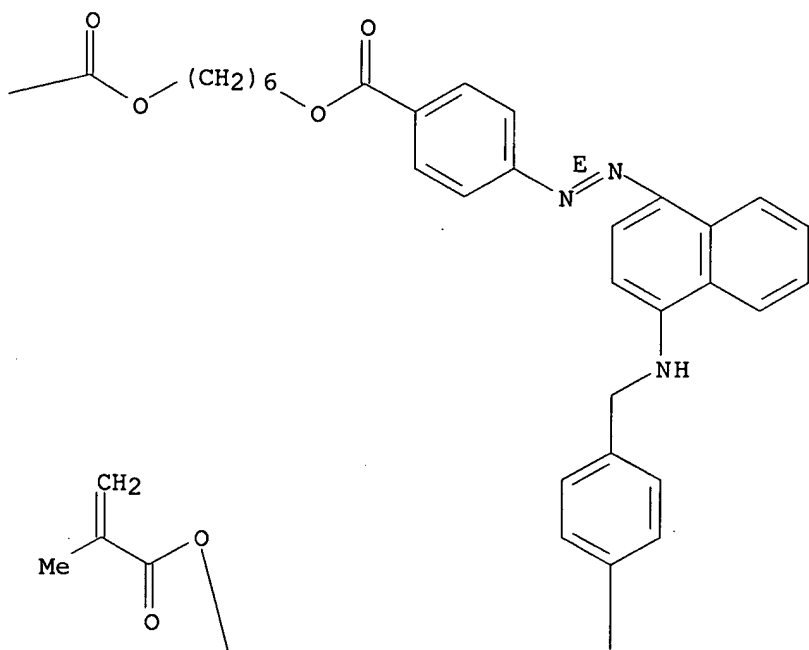
CRN 868754-67-0

CMF C88 H88 N6 O14

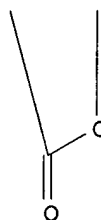
Double bond geometry as shown.



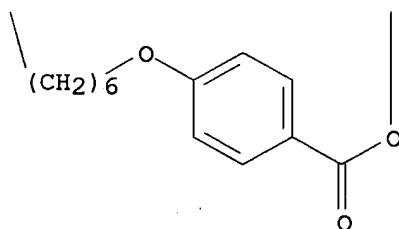
PAGE 1-B



PAGE 2-A

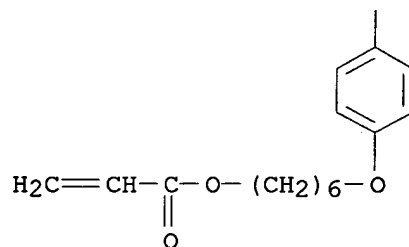
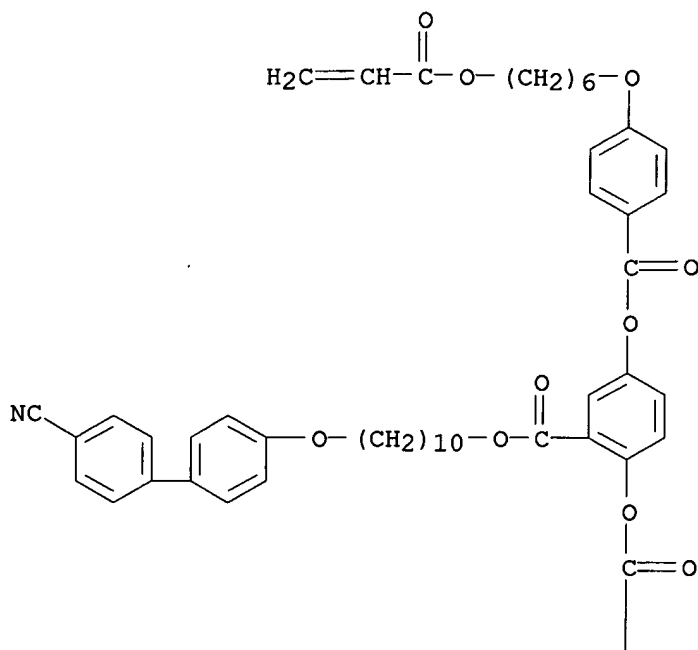


PAGE 2-B



CM 2

CRN 853993-28-9  
CMF C62 H69 N O13



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:1103065 CAPLUS  
 DOCUMENT NUMBER: 143:387831  
 TITLE: Organosilicon compound-containing polymerizable liquid-crystal composition  
 INVENTOR(S): Hirai, Yoshiharu; Kato, Takashi  
 PATENT ASSIGNEE(S): Japan  
 SOURCE: U.S. Pat. Appl. Publ., 73 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005224754	A1	20051013	US 2004-2225	20041203
JP 2006126757	A2	20060518	JP 2004-329158	20041112

PRIORITY APPLN. INFO.:

JP 2003-415332 A 20031212

JP 2004-126705 A 20040422

JP 2004-289837 A 20041001

AB A polymerizable liquid-crystal composition is for obtaining a liquid-crystal film having good adhesiveness to supporting substrates. A polymerizable liquid-crystal layer of controlled alignment can be formed from the polymerizable liquid-crystal composition. The polymerizable liquid-crystal composition contains a polymerizable liquid-crystal compound (mixture) and an organosilicon alignment compound having a

primary amino group.

IT 866687-97-0P 866688-01-9P 866688-08-6P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(film; organosilicon alignment compound-containing polymerizable

liquid-crystal composition for optical film for liquid crystal displays)

RN 866687-97-0 CAPLUS

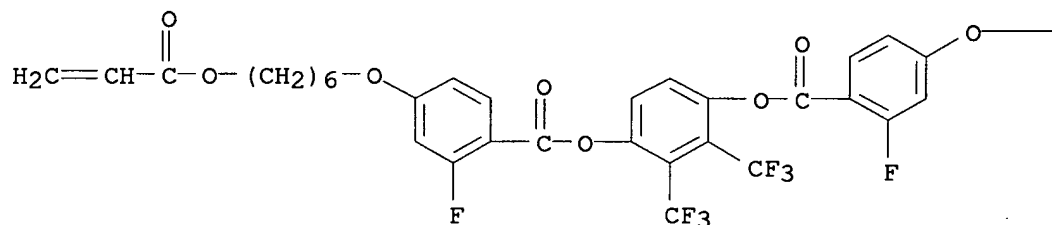
CN Benzoic acid, 2-fluoro-4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]-, 2,3-bis(trifluoromethyl)-1,4-phenylene ester, polymer with 6-[(4'-cyano[1,1'-biphenyl]-4-yl)oxy]hexyl 2-propenoate and 9-methyl-9H-fluorene-2,7-diyl bis[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoate] (9CI) (CA INDEX NAME)

CM 1

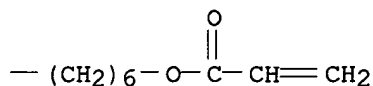
CRN 737001-94-4

CMF C40 H38 F8 O10

PAGE 1-A



PAGE 1-B

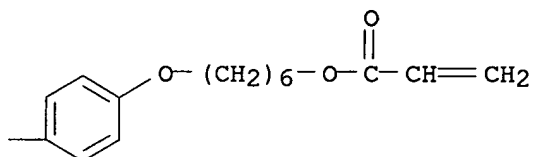
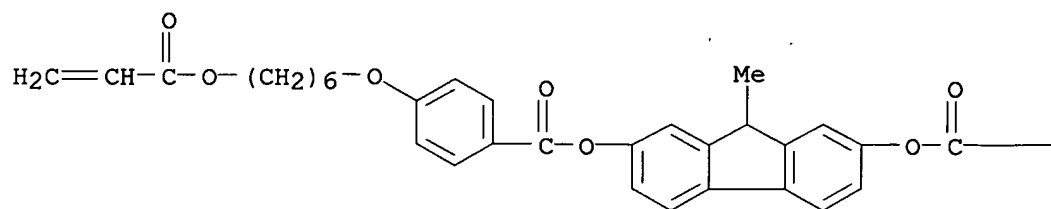


CM 2

CRN 586354-92-9

CMF C46 H48 O10

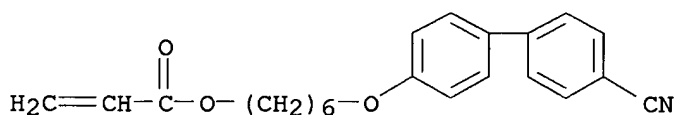




CM 3

CRN 89823-23-4

CMF C22 H23 N O3



RN 866688-01-9 CAPLUS

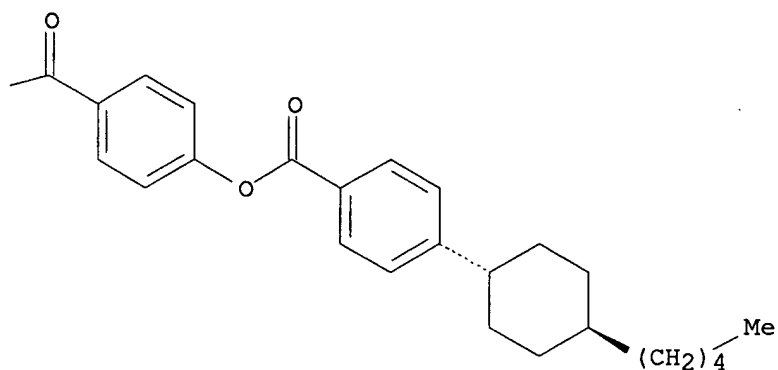
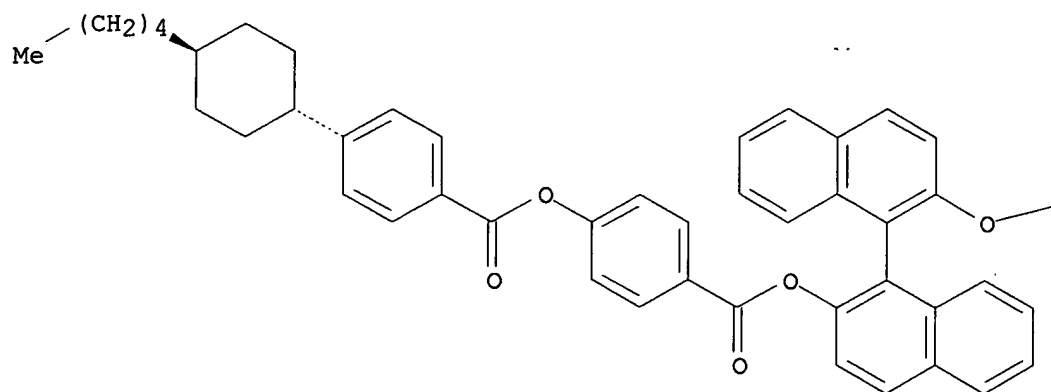
CN Benzoic acid, 2-fluoro-4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]-, 2,3-bis(trifluoromethyl)-1,4-phenylene ester, polymer with [1,1'-binaphthalene]-2,2'-diyl bis[4-[[4-(trans-4-pentylcyclohexyl)benzoyl]oxy]benzoate], 6-[(4'-cyano[1,1'-biphenyl]-4-yl)oxy]hexyl 2-propenoate and 9-methyl-9H-fluorene-2,7-diyl bis[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoate] (9CI) (CA INDEX NAME)

CM 1

CRN 850441-06-4

CMF C70 H70 O8

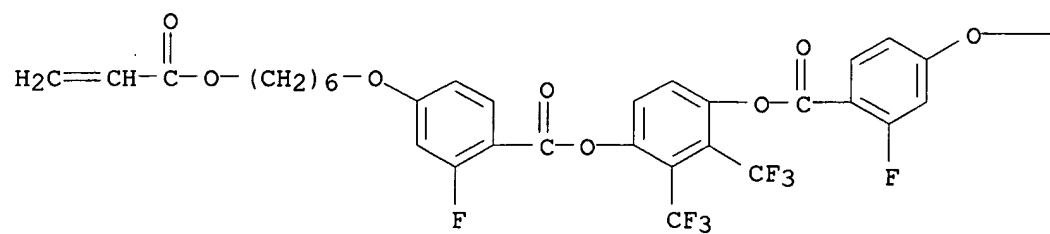
Relative stereochemistry.

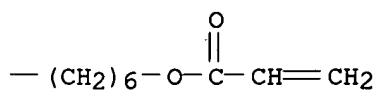


CM 2

CRN 737001-94-4

CMF C40 H38 F8 O10

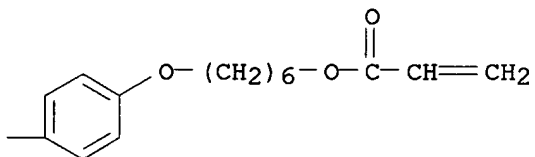
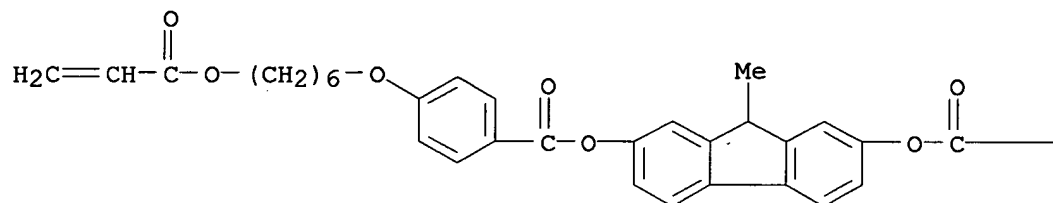




CM 3

CRN 586354-92-9

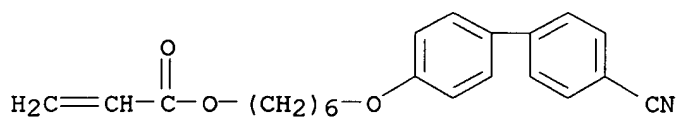
CMF C46 H48 O10



CM 4

CRN 89823-23-4

CMF C22 H23 N O3



RN 866688-08-6 CAPLUS

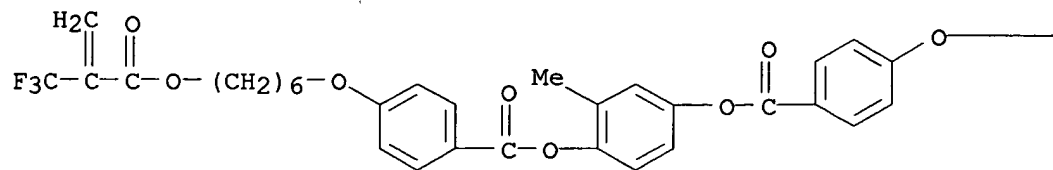
CN Benzoic acid, 4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]-, 9-methyl-9H-fluorene-2,7-diyl ester, polymer with 6-[(4'-cyano[1,1'-biphenyl]-4-yl)oxy]hexyl 2-propenoate and 2-methyl-1,4-phenylene bis[4-[[6-[[1-oxo-2-(trifluoromethyl)-2-propenyl]oxy]hexyl]oxy]benzoate] (9CI) (CA INDEX NAME)

CM 1

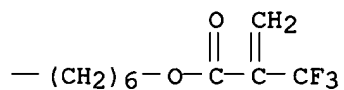
CRN 866688-07-5

CMF C41 H42 F6 O10

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PAGE 1-B

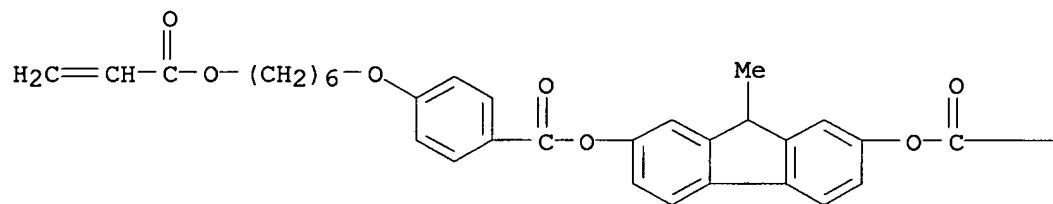


CM 2

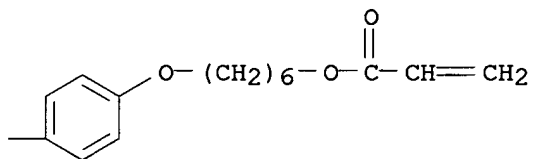
CRN 586354-92-9

CMF C46 H48 O10

PAGE 1-A



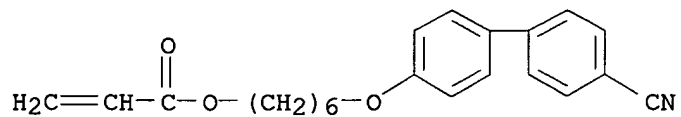
PAGE 1-B



CM 3

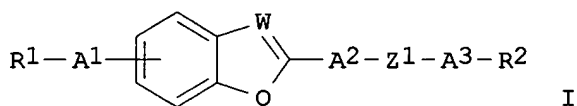
CRN 89823-23-4

CMF C22 H23 N O3



ACCESSION NUMBER: 2004:20776 CAPLUS  
 DOCUMENT NUMBER: 140:94878  
 TITLE: Polymerizable, luminescent compounds and mixtures, luminescent polymer materials and their use  
 INVENTOR(S): Poetsch, Eike; Jacob, Thomas; Serrano, Jose; Pinol, Milagros; Gimenez, Raquel; Stumpe, Joachim; Fischer, Thomas; Rosenhauer, Regina  
 PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany  
 SOURCE: PCT Int. Appl., 65 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004003103	A1	20040108	WO 2003-EP6448	20030618
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003249852	A1	20040119	AU 2003-249852	20030618
EP 1517974	A1	20050330	EP 2003-761474	20030618
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005531617	T2	20051020	JP 2004-516618	20030618
US 2005244718	A1	20051103	US 2004-519712	20041230
PRIORITY APPLN. INFO.:			EP 2002-14067	A 20020701
			WO 2003-EP6448	W 20030618
OTHER SOURCE(S):			MARPAT 140:94878	
GI				



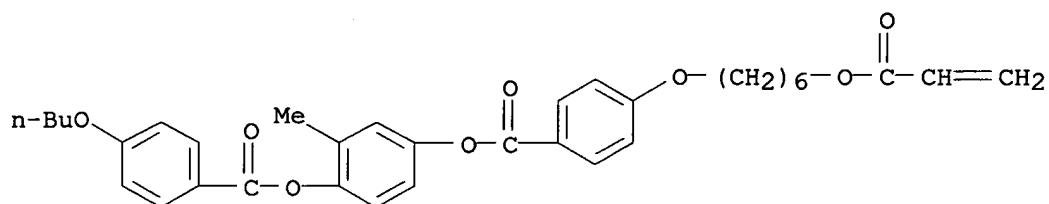
AB The invention relates to polymerizable, luminescent compds. I wherein R1, R2 are H, halogen, NO2, CN, etc., A1 is (substituted) 1,4-phenylene, A2 is (substituted) 1,4-phenylene or 2,5-thiophene, A3 is 1,4-phenylene, oxazoline, etc., Z1 is CH:CH, CF:CH, CH:CF, CF:CF, or direct bond, W is CH:, N:, or COCH:, and Q is O, S, or amino,. Furthermore the invention relates to polymerizable mixts. containing compds. according to the invention and preferably at least one polymerizable mesogenic compound Polymer materials obtainable by polymerizing such mixts. are also described. These compds., mixts. and materials show advantageous photoluminescent and/or electroluminescent properties and may be used in light emitting devices and optical- or electrooptical display elements.

IT 642735-04-4P  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP

(polymerizable, luminescent compds. and mixts., luminescent polymer materials and their use)

CN Benzoic acid, 4-butoxy-, 2-methyl-4-[[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]phenyl ester, polymer with 2-methyl-1,4-phenylene bis[4-[3-[(1-oxo-2-propenyl)oxy]propoxy]benzoate], 4-(trans-4-propylcyclohexyl)phenyl 4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoate and 4-(trans-4-propylcyclohexyl)phenyl 4-[3-[(1-oxo-2-propenyl)oxy]propoxy]benzoate (9CI) (CA INDEX NAME)

CMF C34 H38 O8

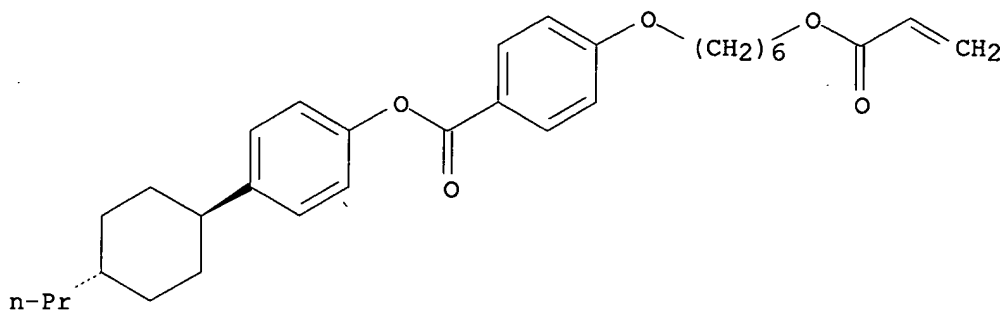


CMF C28 H34 O5

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CMF C31 H40 O5

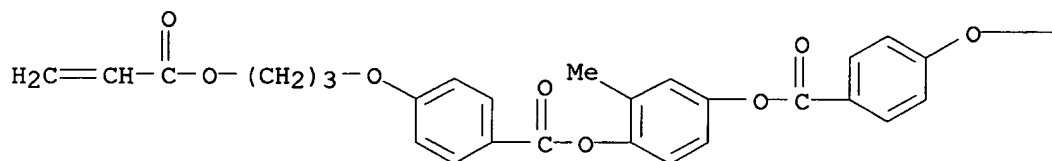
Relative stereochemistry.



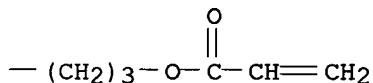
CM 4

CRN 174063-87-7  
CMF C33 H32 O10

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:879782 CAPLUS

DOCUMENT NUMBER: 139:365376

TITLE: Polymerizable compounds, polymers made from them and their use in liquid-crystalline resin compositions

INVENTOR(S): Yumoto, Masatoshi; Ichihashi, Mitsuyoshi; Hayashi, Keiichiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003321430	A2	20031111	JP 2002-122836	20020424
PRIORITY APPLN. INFO.:			JP 2002-122836	20020424

OTHER SOURCE(S): MARPAT 139:365376

AB The compds. are of polyphenyl type substances having hydroxy groups which are modified with acrylate ester groups via spacer groups.

IT 620524-07-4P 620524-12-1P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polymerizable compds., polymers made from them and their use in liquid-crystalline resin compns.)

RN 620524-07-4 CAPLUS

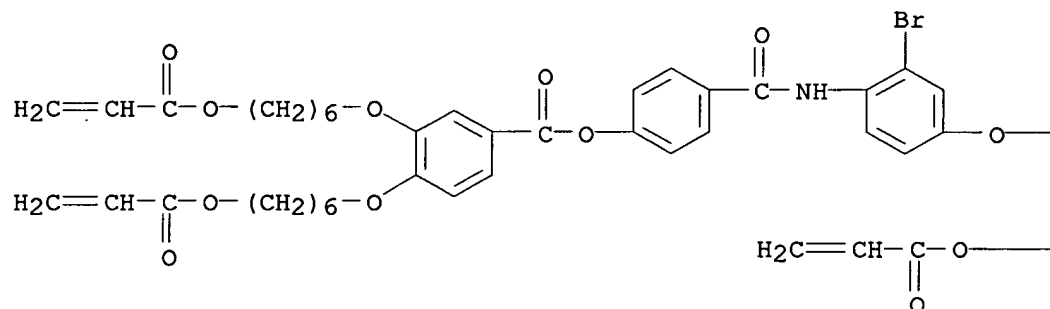
CN Benzoic acid, 3,4-bis[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]-, 4-[[[4-[[3,4-bis[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]-2-bromophenyl]amino]carbonyl]phenyl ester, polymer with 1,4-phenylene bis[4-[4-[(1-oxo-2-propenyl)oxy]butoxy]benzoate] (9CI) (CA INDEX NAME)

CM 1

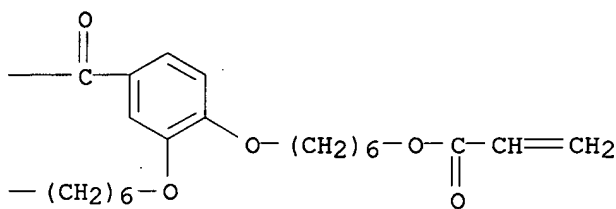
CRN 620523-38-8

CMF C63 H74 Br N O17

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PAGE 1-B



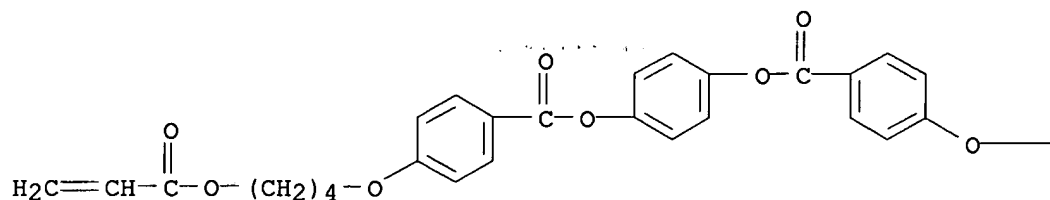
CM 2

CRN 132694-65-6

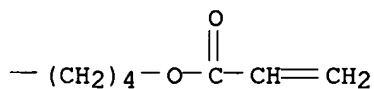
CMF C34 H34 O10



PAGE 1-A



PAGE 1-B



RN 620524-12-1 CAPLUS

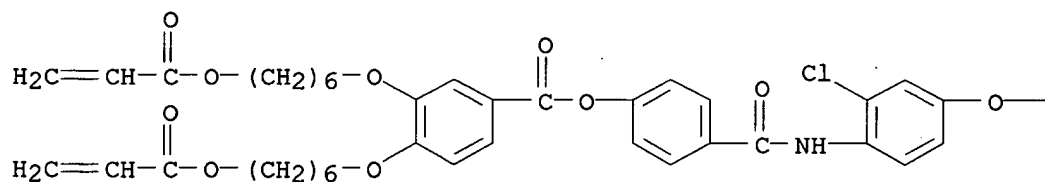
CN Benzoic acid, 3,4-bis[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]-, 4-[[[2-chloro-4-[[4-[4-[(1-oxo-2-propenyl)oxy]butoxy]benzoyl]oxy]phenyl]amino]carbonyl]phenyl ester, polymer with 1,4-phenylene bis[4-[4-[(1-oxo-2-propenyl)oxy]butoxy]benzoate] (9CI) (CA INDEX NAME)

CM 1

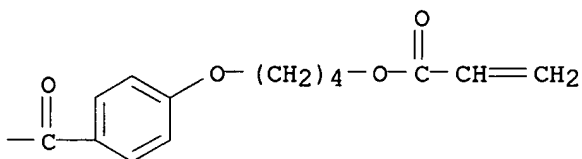
CRN 620523-32-2

CMF C52 H56 Cl N O14

PAGE 1-A



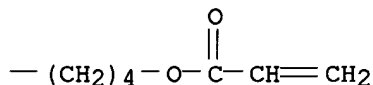
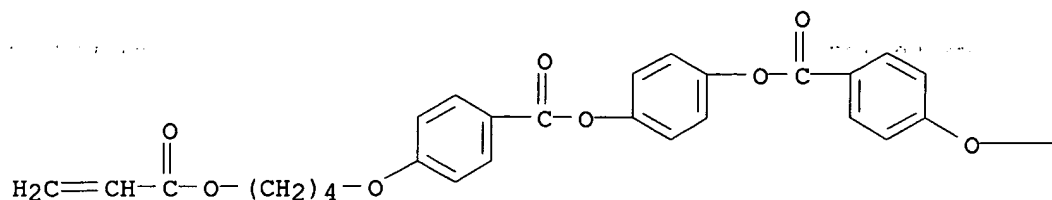
PAGE 1-B



CM 2

CRN 132694-65-6

CMF C34 H34 O10



L5 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:866700 CAPLUS

DOCUMENT NUMBER: 137:354386

TITLE: Dichroic mixtures, their production and their use

INVENTOR(S): Buchecker, Richard; Peglow, Thomas; Cherkaoui, Zoubair  
M.; Moia, Franco

PATENT ASSIGNEE(S): Rollic A.-G., Switz.

SOURCE: Eur. Pat. Appl., 30 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1256602	A1	20021113	EP 2001-810445	20010508
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
WO 2002090447	A1	20021114	WO 2002-CH44	20020128
WO 2002090447	C1	20040129		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002224717	A1	20021118	AU 2002-224717	20020128
EP 1385914	A1	20040204	EP 2002-715349	20020128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CN 1507478	A	20040623	CN 2002-809506	20020128
JP 2004535483	T2	20041125	JP 2002-587515	20020128
US 2004164272	A1	20040826	US 2004-477124	20040408
PRIORITY APPLN. INFO.:			EP 2001-810445	A 20010508
			WO 2002-CH44	W 20020128

AB Disclosed are mesogenic, crosslinkable mixts. comprising at least one

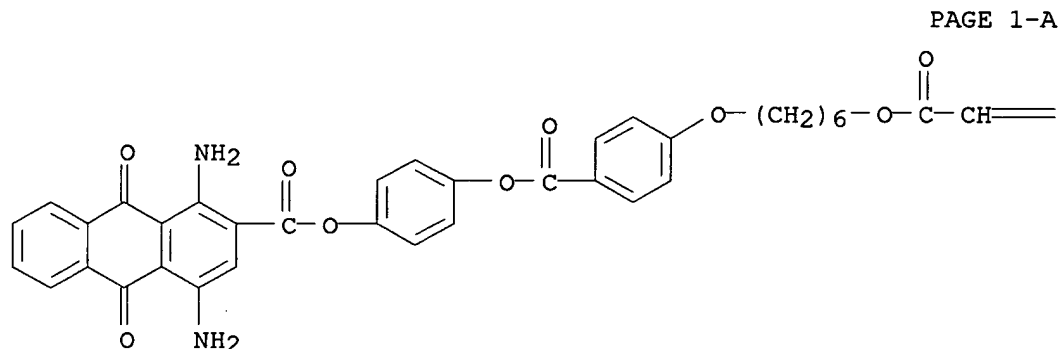
polymerizable liquid crystal and at least one polymerizable dichroic dye of the type AB1wB2xB3yB4z [A is a dichroic residue exhibiting at least partial absorption in the visible region (>400 nm); w-z are 0 or 1 whereby w + x + y + z > 0; B1-B4 are H or organic groups; at least one of which is polymerizable]. Such mixts. may be polymerized to give dichroic plastic films with useful optical properties. In an example, dichroic 6-[4-[4-[6-(acryloyloxy)hexyloxy]phenoxy]benzoyl]phenoxy]hexyl 1,4-diaminoanthraquinone-2-carboxylate dye was prepared and then combined with 1-4 liquid crystalline monomers having 2 acrylate groups, providing polymerizable dichroic liquid crystalline compns.

IT 474901-13-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(dye; dichroic mixts. of polymerizable dyes and monomeric liquid crystals)

RN 474901-13-8 CAPLUS

CN 2-Anthracenecarboxylic acid, 1,4-diamino-9,10-dihydro-9,10-dioxo-, 4-[[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]phenyl ester (9CI)  
(CA INDEX NAME)



PAGE 1-B

=CH<sub>2</sub>

IT 474901-29-6P 474901-30-9P 474901-31-0P  
474901-33-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polymers from dichroic mixts. of polymerizable dyes and monomeric liquid crystals)

RN 474901-29-6 CAPLUS

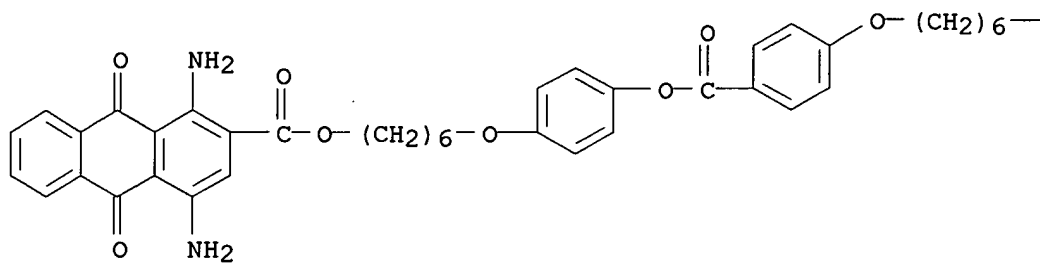
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(CA INDEX NAME)

CM 1

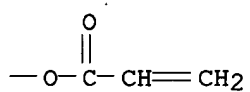
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CMF C43 H44 N2 O10

PAGE 1-A



PAGE 1-B

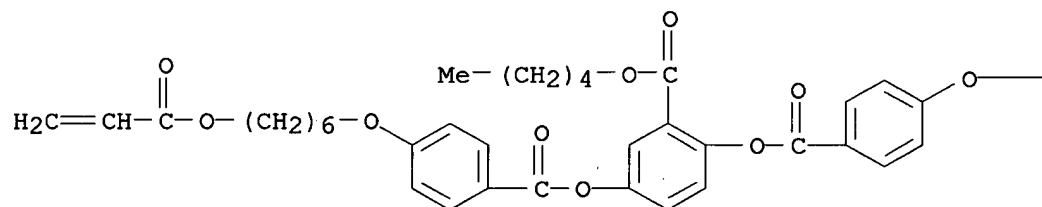


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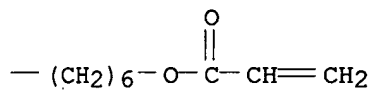
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CMF C44 H52 O12

PAGE 1-A



PAGE 1-B

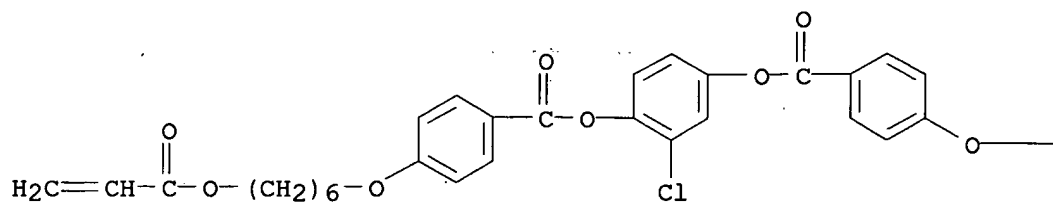


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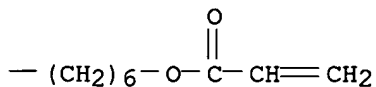
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CMF C38 H41 Cl O10

PAGE 1-A



PAGE 1-B

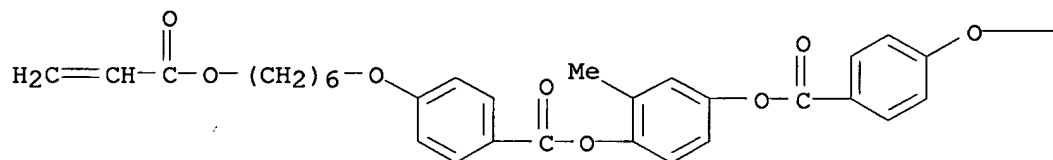


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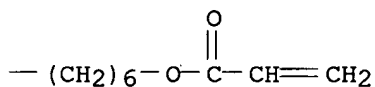
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CMF C39 H44 O10

PAGE 1-A



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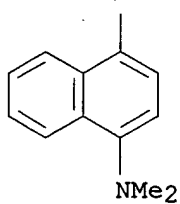
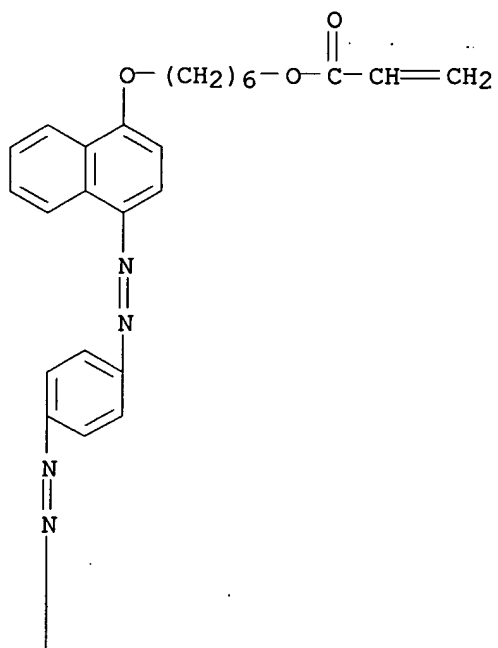
RN 474901-30-9 CAPLUS

CN Benzoic acid, 2,5-bis[[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]-, pentyl ester, polymer with 2-chloro-1,4-phenylene bis[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoate], 6-[[4-[[4-[[4-(dimethylamino)-1-naphthalenyl]azo]phenyl]azo]-1-naphthalenyl]oxy]hexyl 2-propenoate and 2-methyl-1,4-phenylene bis[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoate] (9CI) (CA INDEX NAME)

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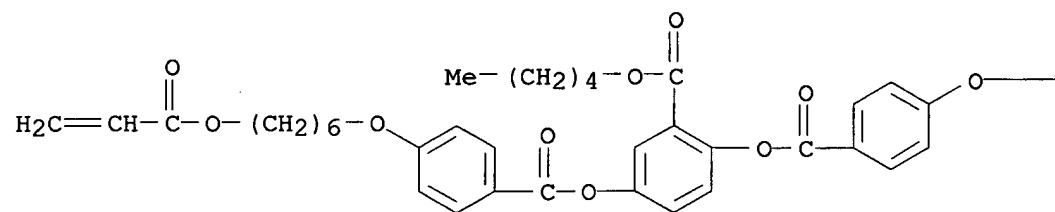
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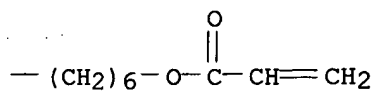


CM 2

CRN 185993-72-0  
CMF C44 H52 O12



PAGE 1-B

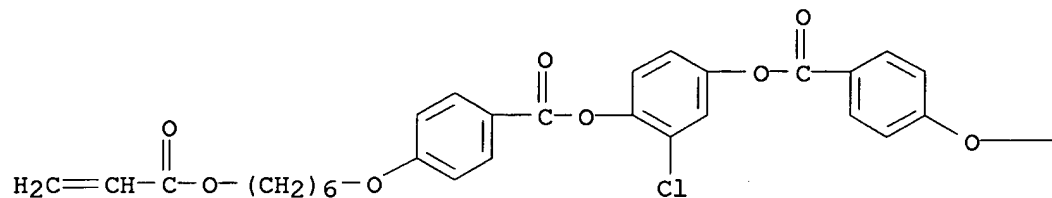


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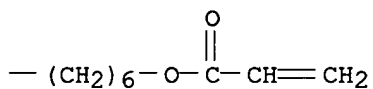
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CMF C38 H41 Cl O10

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PAGE 1-B

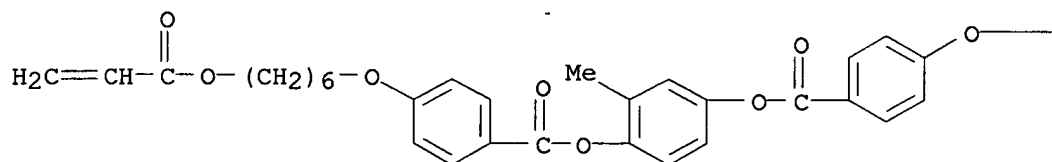


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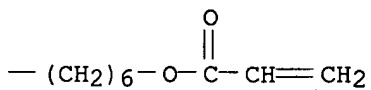
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CMF C39 H44 O10

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RN 474901-31-0 CAPLUS

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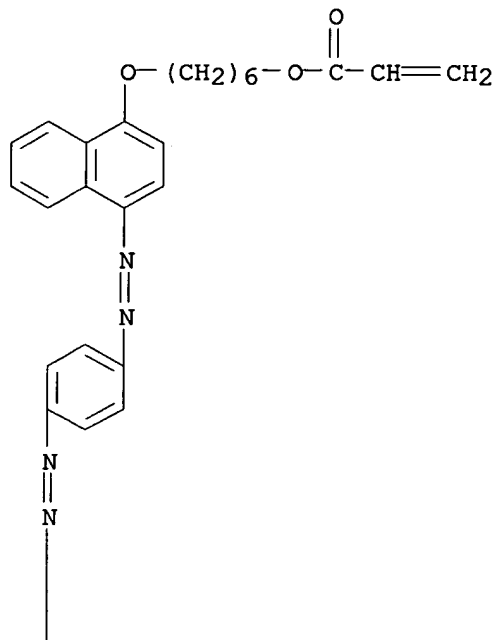
6-[4-[[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]phenoxy]hexyl ester, polymer with 2-chloro-1,4-phenylene bis[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoate], 6-[[4-[[4-[[4-(dimethylamino)-1-naphthalenyl]azo]phenyl]azo]-1-naphthalenyl]oxy]hexyl 2-propenoate, 2-methyl-1,4-phenylene bis[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoate] and pentyl 2,5-bis[[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]benzoate (9CI) (CA INDEX NAME)

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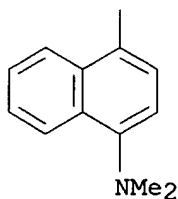
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CMF C37 H37 N5 O3

PAGE 1-A



PAGE 2-A



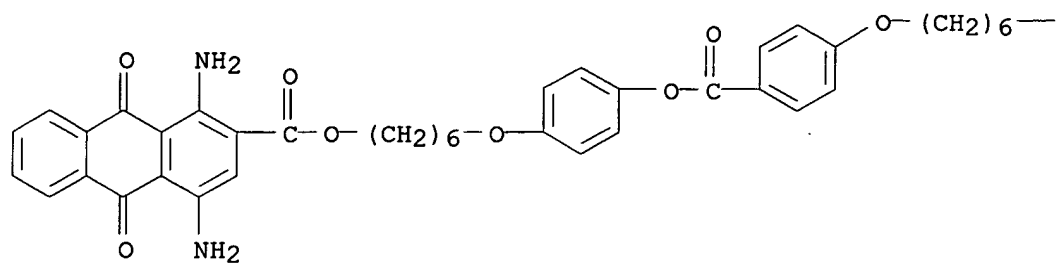
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CRN 474901-14-9

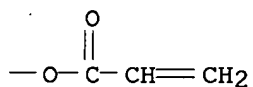
CMF C43 H44 N2 O10



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PAGE 1-B

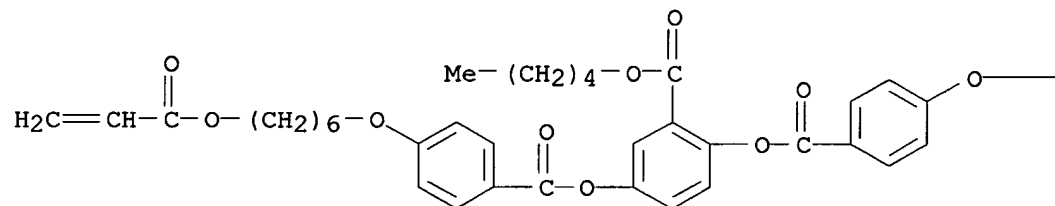


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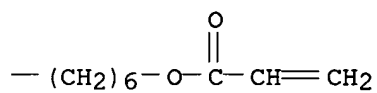
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CMF C44 H52 O12

PAGE 1-A



PAGE 1-B

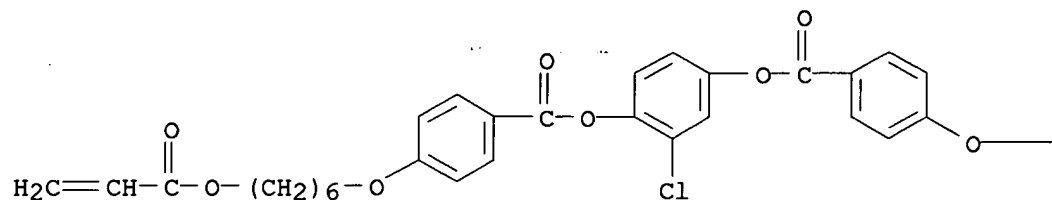


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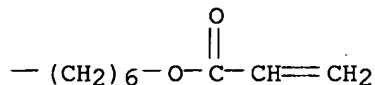
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CMF C38 H41 Cl O10

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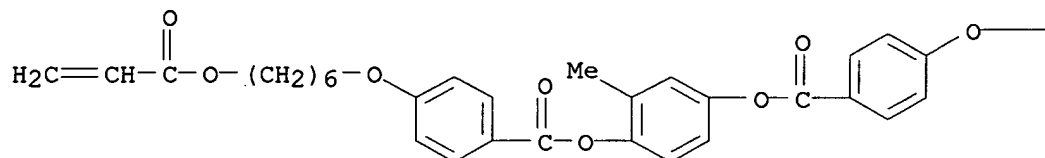


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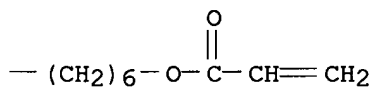
CRN 125248-71-7

CMF C39 H44 O10

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RN 474901-33-2 CAPLUS

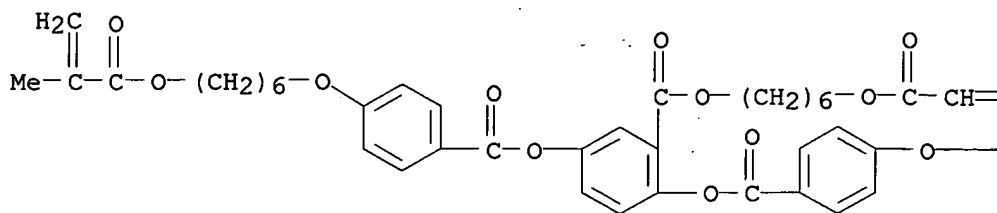
CN 2-Anthracenecarboxylic acid, 1,4-diamino-9,10-dihydro-9,10-dioxo-, 6-[4-[[4-[[6-[(1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]phenoxy]hexyl ester, polymer with 6-[(1-oxo-2-propenyl)oxy]hexyl 2-[[4-[[6-[4-[[4'-cyano[1,1'-biphenyl]-4-yl]oxy]carbonyl]phenoxy]hexyl]oxy]benzoyl]oxy]-5-[[4-[[6-[(2-methyl-1-oxo-2-propenyl)oxy]hexyl]oxy]benzoyl]oxy]benzoate (9CI) (CA INDEX NAME)

CM 1

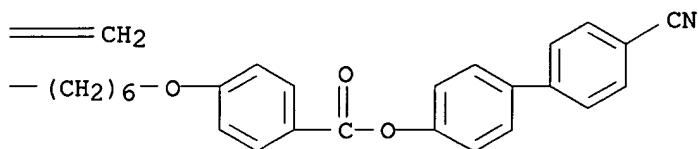
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CMF C66 H67 N O15

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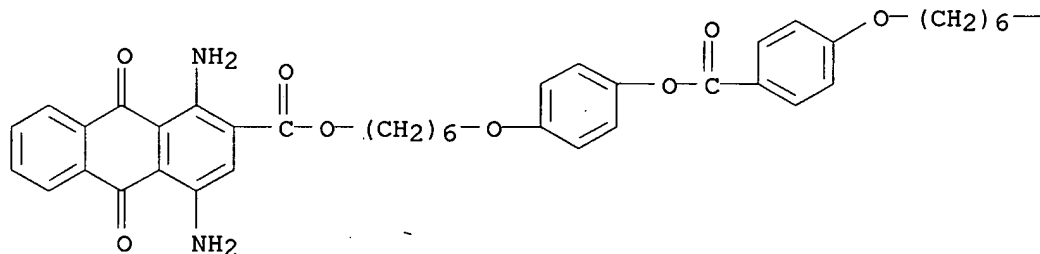


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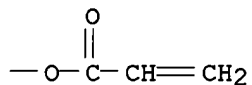
CRN 474901-14-9

CMF C43 H44 N2 O10

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REFERENCE COUNT:

9

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:446122 CAPLUS

DOCUMENT NUMBER: 137:26396

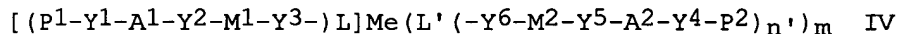
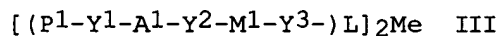
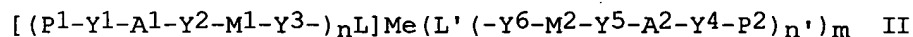
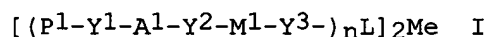
TITLE: Use of chiral, uncharged metal compounds as doping agents for liquid crystals

INVENTOR(S): Precht1, Frank; Haremza, Sylke; Parker, Robert; Kuerschner, Kathrin; Braun, Manfred; Hahn, Antje;

PATENT ASSIGNEE(S): Fleischer, Ralf  
 SOURCE: Basf Aktiengesellschaft, Germany  
 Eur. Pat. Appl., 26 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1213293	A1	20020612	EP 2001-128679	20011201
EP 1213293	B1	20040623		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
DE 10061625	A1	20020613	DE 2000-10061625	20001211
JP 2002220366	A2	20020809	JP 2001-377549	20011211
US 2003066984	A1	20030410	US 2001-11748	20011211
US 6695977	B2	20040224		
PRIORITY APPLN. INFO.:			DE 2000-10061625	A 20001211

GI



AB The present invention involves the use of chiral, uncharged compds. as doping agents for liquid crystals. The indicated compds. are I or II, for which the variables are defined, independently of each other, as follows: P1 and P2 are H, C1-C12 alkyl groups, a polymerizable or polymerized group, or a group containing such a polymerizable group; Y1 through Y6 are groups -O-, -S-, -CO-, -CO-O-, -O-CO-, -CO-N(R)-, -(R)N-CO-, -O-CO-O-, -O-CO-N(R)-, (R)N-CO-O-, or -(R)N-CO-N(R)-; R is H or a C1-C4 alkyl; A1 and A2 are spacers with up to 30 C atoms; M1 and M2 are mesogen groups; n' and n equal 0 or 1; m is 1, 2, or 3, in which the group L'(-Y6-M2-Y5-A2-Y4-P2)<sub>n</sub> in formula II can represent different moieties; Me is either a transition metal of the 4th, 5th, or 6th period (with the exception of Tc, Ag, Cd, Au, Hg, and the lanthanides) or a Group IVA element (with the exception of C and Pb); L is a tridentate ligand including N-, O-, P-, or S-containing groups, over which ≥1 free electron pair is available for coordination to the metal Me; and L' is an organic group with up to 12 C atoms. The invention also includes compds. III and IV, for which all variables are the same as for the previous compound, as well as liquid crystalline compds. containing ≥1 of the indicated compds.

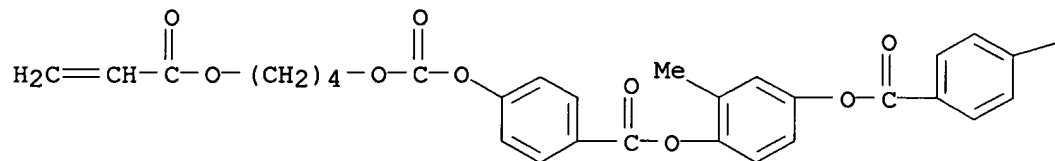
IT 187585-64-4

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

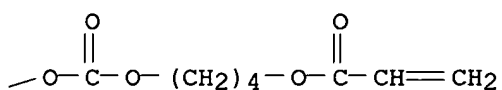
(doping of; use of chiral, uncharged metal compds. as doping agents for

liquid crystals)  
 RN 187585-64-4 CAPLUS  
 CN Benzoic acid, 4-[[[4-[(1-oxo-2-propenyl)oxy]butoxy]carbonyl]oxy]-,  
 2-methyl-1,4-phenylene ester (9CI) (CA INDEX NAME)

PAGE 1-A



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REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT